

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

Claims 1-22. (Cancelled)

Claim 23. (Previously Presented): A polyurethane solution containing alkoxy silane structural units, wherein the polyurethane is the reaction product of

- a) at least one at least difunctional polyol having an hydroxyl number of from 8 to 200,
- b) at least one at least difunctional polyisocyanate having a molecular weight of 140 to 1,500,
- c) at least one low molecular weight at least difunctional alcohol and/or amine having a molecular weight of 32 to 500,
- d) at least one compound containing at least one alkoxy silane group and an isocyanate-reactive group, wherein the theoretical content of $-\text{Si}(\text{O}-)_3$ structural units is less than 1.2 wt.%, based on the total solids content of the polyurethane, and
- e) optionally a monofunctional compound containing an amino, alcohol or oxime group, other than a compound falling within the scope of component d),

in the presence of an organic solvent, wherein the equivalents of component d) are at least 50% of the total equivalents of components d) and e) and wherein the number of terminal alkoxy silane groups must be at least 50 wt.% of all the incorporated alkoxy silane groups.

Claim 24. (Previously Presented): The polyurethane solution of Claim 23 wherein the polyurethane is reaction product of

- a) 40 to 92 wt.% of said at least one at least difunctional polyol,
- b) 7 to 50 wt.% of at least one at least difunctional polyisocyanate having a molecular weight of 140 to 1,500,

- c) 0.5 to 20 wt.% of at least one low molecular weight at least difunctional alcohol and/or amine having a molecular weight of 32 to 500,
 - d) 0.1 to 5 wt.% of at least one compound containing at least one alkoxy silane group and an isocyanate-reactive group and
 - e) optionally a monofunctional compound containing an amino, alcohol or oxime group, other than a compound falling within the scope of component d),
- wherein the percentages are based on weight of the polyurethane and the equivalents of component d) are at least 75% of the total equivalents of components d) and e).

Claim 25. (Previously Presented): The polyurethane solution of Claim 23 wherein the polyurethane is the reaction product of

- a) 47 to 88 wt.% of said at least one at least difunctional polyol,
- b) 10 to 40 wt.% of at least one at least difunctional polyisocyanate having a molecular weight of 140 to 1,500,
- c) 0.8 to 17 wt.% of at least one low molecular weight at least difunctional alcohol and/or amine having a molecular weight of 32 to 500,
- d) 0.2 to 3.0 wt.% of a compound containing an alkoxy silane group and an isocyanate-reactive group and
- e) 0-0.5 wt.% of a monofunctional compound containing an amino, alcohol or oxime group, other than a compound falling within the scope of component d),

wherein the percentages are based on weight of the polyurethane and the equivalents of component d) are at least 95% of the total equivalents of components d) and e).

Claim 26. (Previously Presented): The polyurethane solution of Claim 23 wherein at least 50 wt.% of component a) is at least one polycarbonate diol having a molecular weight of 900 to 2,500.

Claim 27. (Previously Presented): The polyurethane solution of Claim 23 wherein component a) contains 10 to 60 wt.% of at least one hydrophilic polyol and 23 to 50 wt.% of at least one non-hydrophilic polyol, wherein the percentages are based on the total solids content of the polyurethane, provided that the total amount of component a) is not more than 92 wt.% of the total solids content of the polyurethane.

Claim 28. (Previously Presented): The polyurethane solution of Claim 23 wherein at least 75 wt.% of component b) is isophorone diisocyanate.

Claim 29. (Previously Presented): The polyurethane solution of Claim 23 wherein the component b) comprises 2,4- and/or 2,6-diisocyanatotoluene and/or 4,4'-diisocyanatodiphenyl-methane.

Claim 30. (Previously Presented): The polyurethane solution of Claim 23 wherein component b) comprises at least one diisocyanate containing allophanate groups.

Claim 31. (Previously Presented): The polyurethane solution of Claim 23 wherein 2 to 16 wt.% of component c) is a hydrophilic difunctional compound containing salt groups.

Claim 32. (Previously Presented): The polyurethane solution of Claim 23 wherein component c) comprises a hydrophilic compound and a) comprises a hydrophilic polyol.

Claim 33. (Previously Presented): The polyurethane solution of Claim 23 wherein component c) comprises a positive amount up to 2 wt.%, based on the total solids content of the polyurethane, of a diamino-functional compound containing alkoxysilane groups.

Claim 34. (Previously Presented): The polyurethane solution of Claim 23 wherein component c) comprises 0.1 to 1.5 wt.%, based on the total solids content of the polyurethane, of hydrazine hydrate, adipic acid dihydrazide and/or the reaction product of 2 moles propylene carbonate with 1 mole hydrazine.

Claim 35. (Previously Presented): The polyurethane solution of Claim 23 wherein component d) comprises 0.3 to 1.3 wt.%, based on the total solids content of the polyurethane, of a compound containing an isocyanate-reactive group and at least one alkoxy silane group.

Claim 36. (Previously Presented): The polyurethane solution of Claim 23 wherein component d) comprises a monoamino-functional reaction product containing aspartic acid ester structures of a monoamino-functional alkoxy silane with 0.5 to 1.1 equivalents of a maleic acid alkyl ester.

Claim 37. (Cancelled)

Claim 38. (Previously Presented): The polyurethane solution of Claim 23 wherein component d) comprises 0.3 to 1.3 wt.%, based on the total solids content of the polyurethane, of a monoamino-functional alkoxy silane and component c) comprises 0.1 to 2.0 wt.%, based on the total solids content of the polyurethane, of a diamino-functional alkoxy silane, provided that the weight of terminal alkoxy silane groups is at least 50 wt.% of all the alkoxy silane groups incorporated.

Claim 39. (Previously Presented): A process for preparing the polyurethane solution of Claim 23 which comprises

- a) preparing an isocyanate-functional polyurethane in a one- or two-stage reaction from at least one polyol a), at least one difunctional polyisocyanate b), and at least one low molecular weight component c),
- b) subsequently reacting the product of step a) with at least one compound d) containing an alkoxy silane group and an isocyanate-reactive group and optionally a monofunctional component e) to obtain a polyurethane with

alkoxysilane structural units which no longer contains free isocyanate groups, and

- c) adding an organic solvent either before, during or after step a) in an amount such that the resulting polyurethane solution with alkoxysilane end groups has a solids content of 9 to 65 wt.%.

Claim 40. (Currently Amended): The process of Claim 39 which comprises

- a) reacting components a), b) and optionally c) in a one-stage reaction, optionally in the presence of suitable solvents, to obtain an isocyanate-functional polyurethane,
- b) optionally adding a an additional amount of polyisocyanate b) and/or low molecular weight difunctional component c) until a ~~desired~~ viscosity of from 1,000 to 200,000 mPas (at 23°C) and molecular weight (Mn) of from 4,000 to 5000,000, is achieved, and
- c) chain-stopping the reaction by adding a monoamino-functional compound d) containing an alkoxysilane group.

Claim 41. (Previously Presented): A paint, coating, sealant or adhesive compositions containing the polyurethane solution of Claim 23.

Claim 42. (Previously Presented): A plastic coated with the polyurethane solution of Claim 23.

Claim 43. (Previously Presented): A textile or leather coated with the polyurethane solution of Claim 23.

Claim 44. (Previously Presented): A textile coated with the polyurethane solution of Claim 23, wherein the coating is permeable to water vapor.

Claim 45. (Previously Presented): A polyurethane solution containing alkoxyasilane structural units, wherein the polyurethane is the reaction product of

- a) at least one at least difunctional polyol having an hydroxyl number of from 8 to 200 and a molecular weight of up to 16,000,
- b) at least one at least difunctional polyisocyanate having a molecular weight of 140 to 1,500,
- c) at least one low molecular weight at least difunctional alcohol and/or amine having a molecular weight of 32 to 500,
- d) at least one compound containing at least one alkoxyasilane group and an isocyanate-reactive group, wherein the theoretical content of $-\text{Si}(\text{O}-)_3$ structural units is less than 1.2 wt.%, based on the total solids content of the polyurethane, and
- e) optionally a monofunctional compound containing an amino, alcohol or oxime group, other than a compound falling within the scope of component d),

in the presence of an organic solvent, wherein the equivalents of component d) are at least 50% of the total equivalents of components d) and e) and wherein the number of terminal alkoxyasilane groups must be at least 50 wt.% of all the incorporated alkoxyasilane groups.

Claim 46. (Previously Presented): A polyurethane solution containing alkoxyasilane structural units, wherein the polyurethane is the reaction product of

- a) at least one at least difunctional polyol having a molecular weight of 561 to 16,000,
- b) at least one at least difunctional polyisocyanate having a molecular weight of 140 to 1,500,
- c) at least one low molecular weight at least difunctional alcohol and/or amine having a molecular weight of 32 to 500,
- d) at least one compound containing at least one alkoxyasilane group and an isocyanate-reactive group, wherein the theoretical content of $-\text{Si}(\text{O}-)_3$ structural units is less than 1.2 wt.%, based on the total solids content of the polyurethane, and
- e) optionally a monofunctional compound containing an amino, alcohol or oxime

group, other than a compound falling within the scope of component d), in the presence of an organic solvent, wherein the equivalents of component d) are at least 50% of the total equivalents of components d) and e) and wherein the number of terminal alkoxysilane groups must be at least 50 wt.% of all the incorporated alkoxysilane groups.